

AVANESOVA, A.M.; MARRAROVA, T.A.

Studying the thermal stability of clay sands processed by certain
chemical reagents. Trudy ANII DN no.10:348-357 '60. (MIRA 14:4)
(Oil well drilling—Thermal properties)

MARKAROVA, T.A.

Carbohydrate-phenolic resin as a new chemical reagent. Sbor.
nauch.-tekhn. inform. Azerb. inst. nauch.-tekhn. inform. Ser. Neft.
prom. no.4:66-72 '63.

Mechanostructural and thixotropic properties of drilling fluids
processed with carbohydrate-phenol reagents. Ibid.:72-76
(MIRA 18:9)

BASLAVSKAYA, S.S.; MARKAROVA, Ye.N.

Effect of phosphorus on the light and dark reactions of
photosynthesis in *Scenedesmus quadricauda*. *Fiziol.rast.* 6 no.2:
151-157 Mr-Apr '59. (MIRA 12:5)

1. Department of Plant Physiology, M.V.Lomonosov Moscow State
University, Moscow.

(Plants, Effect of phosphorus on)
(Photosynthesis)

L 7743-66 EWT(1)/FS(v)-3 DD

ACC NR: AP5028173

SOURCE CODE: UR/0319/65/050/011/1568/1570

AUTHOR: Markarova, Ye. N.; Baslavskaya, S. S.

ORG: none

32
B

TITLE: Growth and photosynthesis of a synchronous culture of *Scenedesmus obliquus*

SOURCE: Botanicheskiy zhurnal, v. 50, no. 11, 1965, 1568-1570

TOPIC TAGS: plant physiology, photosynthesis, chlorophyll, plant development, chlorella, Scenedesmus

ABSTRACT: Various physiological features of *Scenedesmus obliquus* cells at different developmental stages can be studied if the culture is synchronous, i.e., timed so that cells develop and divide together. A suspension of young cells (concentration $2 \cdot 10^9$ cells/liter) was illuminated for 12 hr ($\sim 10,000$ lux). Air with 3% CO_2 was constantly bubbled through the culture. Every 3 hr the following indices were determined: change in the form and dimensions of cells, weight of the dry mass, chlorophyll content, intensity of photosynthesis and respiration, number of cells, and optical density of the solution. Photographs show the synchronous character of the culture and the uniformity of changes in shape and dimensions of the algae during development. As expected, the increase in volume and dry weight of cells during illumination increased the optical density of the solution. Peak intensity of photosynthesis was observed 6-7 hr after the beginning of illumination. Experimental results showed

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UDC: 581.143.581.132.582.264.581.143.6.621.3.072.9

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ACC NR: AP5028173

that the chlorophyll content in 1 mm^3 of cellular substance was higher for young cells. The data obtained lead to the conclusion that the growth phase of *Scenedesmus obliquus* under these conditions comprises the first 6—9 hr of its cycle, and the maturation phase comprises the subsequent hours. Production of autospores does not proceed until the culture is placed in the dark at the end of 12 hr of illumination. These data agree with experimental results for synchronous *Chlorella* cultures. More research is needed to substantiate the findings for *Scenedesmus obliquus*, however. Orig. art. [JB]

SUB CODE: LS/ SUBM DATE: 20Sep64/ ORIG REF: 004/ OTH REF: 003/ ATD PRESS: 4142

Cord 2/2

1. PONOMARENKO, A.A.; MARKAR'VAR, N.A.; KOMLEV, A.I.
2. USSR (600)
4. Hydrazides
7. Chemiluminescence of hydrazides of derivatives of phthalic acid, A.A. Ponomarenko, N.A. Markar'var, A.I. Komlev, Dokl. AN SSSR 89 no. 6, 1953.
9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

GOLUBEVA, A.A., LIXONOS, A.N., MARKARYAN, A.G., PILSTSKAYA, Ye.M.

Incidence of brucellosis in Stavropol Territory. Zdrav.Rcs.Fed.
2 no.9:18-21 S'58 (MIRA 11:10)

1. Iz Instituta epidemiologii i mikrobiologii i Stavropol'skoy
krayevoy sanitarno-epidemiologicheskoy stantsii.
(STAVROPOL TERRITORY--BRUCELLOSIS)

MARKARYAN, A.G.

KULAGIN, S.M.; FEDOROVA, N.I.; BELAVSKIY, Ye.B.; ANASHEINA, L.Ya.; MARKARYAN, A.G.

Outbreak of Q fever in the Yaroslav Province. Zhur.mikrobiol.epid.
i immun. 29 no.2:44-51 F '58. (MIRA 11:4)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR,
Yaroslavskoy oblastnoy sanitarno-epidemiologicheskoy stantsii i Minister-
stva zdoravookhraneniya RSFSR.

(Q FEVER epidemiology,
in Russia (Rus)

KANTOROVICH, R.A.; MARKARYAN, A.G.

Pathogenicity of the virus of "madness" for man. Vop. virus
no.6:747 N-D '63. (MIRA 17:6)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.

MARK'RYAN, A. I.

37610. rezistentnost' tsist lamblia intestinalis ko v neshnim voz-deystviyam.
trudy in-ta malyarii i med. parazitologii (m-v0 zoravooraneniya arm.
ssr), vyp. 4, 1949 s. 188-95

SO: Letopis' zhurnal' nykh Statey, Vol. 37, 1949

MARKARYAN, A. I.

37609 vliyaniye nekotorykh dezinfitsiruyushchikh veshchestv na tsisty
lamblia intestinalis. trudy in-ta malyarii i med. papazitologii
(m-vo zdoravookhraneniya arm. SSR) vyp. 4, 1949, s. 196-98

SO: Letopis' Zhurnal' nykh Statey, Vol. 37, 1949

USSR / Zooparasitology. Parasitic Protozoa.

G

Abs Jour : Rev Zhur - Biol., No 12, 1958, No 52969

Author : Markaryan, A. I.

Inst : AS ArmSSR

Title : Morphology of Cysts of Human Lamblia.

Orig Pub : Izv. AN ArmSSR. Biol. i s.-kh. n., 1957, 10, No. 8, 79-85

Abstract : In experiments on humans, there are encountered 2-, 4-, 6- and 8-nucleus cysts of *Lamblia intestinalis*, of which the second is the mature form. The appearance of 6- and 8-nucleus cysts evidently is related to changes in the physico-chemical character of the intestinal environment. These cysts do not appear to be normal participants in multiplication.

Card 1/1

MARKARYAN, A.I.

Lambliasis in infants and clinical picture of lambliasis [with
summary in English]. *Pediatrics* 37 no.1:83-86 Ja '59.
(MIRA 12:1)

1. Iz Instituta epidemiologii i gigiyeny Ministerstva zdoravookhra-
neniya Armyskoy SSR (dir. - kand. med. nauk G.S. Papovyan).
(GIARDIASIS, in inf. & child
clin. picture (Rus))

MARKARYAN, A. R.

Biological significance of double mating in animals. Izv. AN Arm.
SSR. Biol. i sel'khoz. nauki. 4 no. 10: 873-878 '51. (MLBA 9:8)

1. Institut shivotnovodstva Ministerstva sel'skogo khozyaystva.
(Fertilisation (Biology))

MARKARYAN A.Kh.
ARAKELYAN, M.A.; MARKARYAN, A.Kh.

Effect of seed of preceeding procreator on maternal organism and
on following offsprings. Zhur. ob. biol. 15 no.4:241-251 J1-Ag '54.
(MLRA 7:9)

(GENETICS,
eff. of first mating on maternal organism & on offsprings
of second mating with different males in rabbits)

USSR/Cultivated Plants. Grains.

M

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20267.

Author : G.K. Grigoryan, G.O. Melkumyan, A.K. Markeryan.

Inst : Not given.

Title : The Variety Testing of Corn in Armenia. (O sortoispytaniya kukuruzy v usloviyakh Armenii).

Orig Pub: Izv. AN Arm SSR, biol. i s.-kh. n., 1956, 9, No 10, 53-65.

Abstract: Resulting from corn-variety testing (1956) in various zones of the Armenian SSR, greater productivity during the milky-waxy ripeness stage was witnessed in the Shirakakaya plain, Loriyskaya steppe and Sevan basin in the post-ripening Krug-Groznenskiy variety, and in the north eastern part of the republic, in the Sterling and VIR-42 hybrid post-ripening varieties. The VIR-42 hybrid distinguished itself in grain yield in all of

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USSR/Cultivated Plants.Grains.

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20267.

M

these zones. Less productive were the early ripening varieties, the North Dakotan, Grushevskaya, and Khar-kovskaya 23. Positive results were obtained in the Ararat Plain by the harvest sowing of corn in the stubble fields right after reaping the grains at the end of June. By this harvest sowing of corn, milky-waxy ripeness was obtained here in the third ten day period of September, and full ripeness in the second ten day period of October, that is to say before the first autumn frost. In a test made by the Armenian Scientific Research Institute for Technical Crops, the harvest sowing of Krasnodarskiy 1/49 variety corn in the milky-waxy ripeness stage yielded 100-105 centners per hectare of cobs (with the husks) and 340-350 centners

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USSR/Cultivated Plants. Grains.

M

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20267.

per hectare of green stuff. At full ripeness the yield of
cobs in their husks with the green stuff amounted to 58-65
centners per hectare, and the stalks with leaves to 220-
235 centners per hectare.

Card : 3/3

USSR / Farm Animals. General Problems. Q

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7258

Author : Pavlov, Ye. F.; ~~Markaryan, A. Kh.~~
Inst : Armenian Scientific Research Institute of
Animal Husbandry and Veterinary Sciences

Title : Comparative Data on the Fat Distribution in
the Various Portions of Milk at Simultaneous
Milking in Domestic Artiodactyla

Orig Pub : Tr. Arm. n.-i. in-ta zhivotnovodstva i veterinarii, 1957, 2, 165-172

Abstract : The morphology of the mammary gland and the
content of fat in milk portions obtained successively at simultaneous milkings of cows, female buffaloes, goats and sheep were studied. The cisterns of the udder and of teats

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USSR / Farm Animals. General Problems. Q

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7258

were largest in cows and goats, smallest in sheep; milk ducts in cows were more numerous and larger than in female buffaloes; their number and size vary greatly in goats and sheep. The contents of fats were smallest in the first portion of milk, largest in the last portion; this difference reaches in cows 7.37 percent, in female buffaloes 6.44, in sheep 4.05, in goats 3.56 percent. The difference of the milk's fat content may be explained by the fact that there exist 2 phases of its secretion: in the first, milk is secreted which is comparatively stable in composition; in the second, an increased quantity of individual milk components which

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USSR / Farm Animals. General Problems. Q

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7258

also include fat, is secreted by the secretory epithelium. -- M. F. Demina

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Q-2

USSR / Farm Animals. Cattle

Abs Jour : Ref Zhur-Biol., No 6, 1958, 26126

Author : Pavlov Yo.F., Markaryan A.Kh.

Inst : Not given

Title : On the Secretion of Butterfat in the Mammary Gland
(K voprosu o soderzhanii zhiira v molochnoy zhlozo)

Orig Pub : Izv.AN ArmSSR.Biol. i s.-kh. n., 1957, 10, No 1, 23-24

Abstract : The factors that influence the content of butterfat in the first and last part of a single milking were investigated. In the experiments in which the mammary gland of cows and goats was catheterized for a short or for a long time it was not possible to obtain milk with an increased content of butterfat because of the absence of the mechanical irritation of the cutaneous surface of the udder. The presence of the

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Q-2

USSR / Farm Animals. Cattle

Abs Jour : Ref Zhur-Biol., No 6, 1968, 26126

Abstract : nervous regulation of the process of the secretion of butterfat is demonstrated by the author by the experiments with frequent milking. When milking is effected at intervals of 1 hour the butterfat content in the milk remains high during the whole time of milking. But after 2-3 hours the butterfat content decreases sharply which may be explained by the exhaustion of butterfat reserve accumulated in the gland. The considerable variations of the amount of butterfat in the milk of the finishing part of a single milking obtained separately from each quarter of the udder permit to assume the existence of separate innervation of each part of the mammary gland. The butterfat which is present in the cells of the secretory epithelium is secreted only from the glands which met with irritation. Different content of the butterfat in the initial and last portions of the milk of

Card 2/3

13

MARKARYAN, A.M.; MIKAYELYAN, S.A.; MIATSEKHOV, T.S., professor, zaslužennyy deyatel' nauki, zaveduyushchiy.

Echinococcosis of the heart. Sov.med. 17 no.8:37 4 '53. (MIRA 6:3)

1. Fakul'tetskaya terapevticheskaya klinika Yerevanskogo meditsinskogo inistituta. (Heart--Hydatidus)

MARKARYAN, A.O.

Organization of medical service for the rural population. Sov.
zdrav. 20 no.6:41-44 '61. (MIRA 14:7)

1. Glavnyy vrach Shamshadinskogo rayona Armyanskoy SSR.
(SHAMSHADIN DISTRICT (ARMENIA)—PUBLIC HEALTH, RURAL)

MARKARYAN, A.O.

Our experience with the eradication of malaria and organization of measures for the prevention of its recurrence in Shamshadin-skiy District of the Armenian SSR. Zhur. eksp. i klin. med. 5 no.2:96-98 '65. (MIRA 19:1)

MARKARYAN, A.F.

"Fostnatal Involution of the Uterus and Regeneration of Its Mucous Membrane in Postpartum Malaria Patients." Cand Med Sci, Sci-Res Inst of Gynecology and Obstetrics, Yerevan, 1954. (RZhBiol, No 7, Apr 55)

SO: SUM. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

20427

S/109/60/005/012/025/035
E192/E582

26.2531

AUTHORS: Grodko, V.A., Zolotarevskiy, V.S., Markar'yan, B.N.
and Rubanovich, I.M.

TITLE: Influence of the Difference Between the Work Functions
of the Electrode of a Thermionic Converter on its
Output Parameters

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol.5, No.12,
pp. 2046-2051

TEXT: The dependence of the specific power w and the
electron efficiency η on the difference between the anode and cathode work
functions, ϕ_K and ϕ_a , is investigated analytically. For the
purpose of calculations it is assumed that the temperatures
 $T_a = \text{const}$ and $T_K = \text{const}$ but $T_K > T_a$; it is also assumed that
 $\phi_a = \text{const}$. Further, the case when the density of the saturation
current of the cathode is less than that of the anode is excluded.
The voltage current characteristic of a thermionic energy converter
can, therefore, be expressed by

$$i = A_K T_K^2 \exp \left(- \frac{e\phi_K}{kT_K} \right) - A_a T_a^2 \exp \left(- \frac{e\phi_a}{kT_a} \right) \quad (1)$$

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where Φ is the overall potential barrier of an electrode, e is the charge of an electron and k is the Boltzmann constant. The potential diagram of such a converter, illustrating the dependence of Φ_K and Φ_a on U (where $U = \Phi_K - \Phi_a$) is represented in Fig.2.

It is seen that in the region I of this figure $\Phi_K = \varphi_K = \text{const}$ and $\Phi_a = \varphi_a = \text{const}$. Eq.(1) can now be written in a different form so that the current i is expressed as a function of U . Now the voltage current characteristic of the limiting case, when $\varphi_K = \varphi_a$, is shown to be in the form of an envelope for all the intermediate characteristics and the second limiting case when $\varphi_K = U_0 + \varphi_a$, where U_0 is the electro-motive force of the converter. Such an envelope is shown in Fig.3; this also shows three characteristics for various values of φ_K at fixed values of φ_a , T_K and T_a . From the investigation of the envelope it is concluded that the maximum specific power of the converter is numerically equal to the area of the largest possible rectangle

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which can be inscribed inside the envelope. The problem of determining this quantity is equivalent to finding the coordinate U_B of the point B of the characteristic at which the maximum power $w_{\max}$ is obtained (see Fig.3). On the basis of Eq.(1) it is shown that the specific power is expressed by

$$w = (\bar{\Phi}_K - \varphi_a) \left[A_K T_K^2 \exp \left(- \frac{e\bar{\Phi}_K}{kT_K} \right) - A_a T_a^2 \exp \left(- \frac{e\varphi_a}{kT_a} \right) \right] \quad (3)$$

There is a considerable difficulty in determining the maximum of this function since its derivative $\partial w / \partial \bar{\Phi}_K = 0$ cannot be solved with respect to $\bar{\Phi}_K$. It is shown, however, that a double inequality specifying the limits for $\bar{\Phi}_K$ can be determined. From this inequality it is found that the voltage at point B (see Fig.3) is approximately given by

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$$U_D = (\Phi_K - \Phi_A)_{\text{max}} \approx \frac{\pi T_K}{e} \left[1 - \frac{A_K T_K^2}{2 A_A T_A^2} \exp \left[1 - \frac{e \Phi_A}{\pi} \left(\frac{1}{T_A} - \frac{1}{T_K} \right) \right] \right] \times \\ \times \left[1 + \exp \left(- \frac{T_K + T_A}{T_K} \right) \right] \quad (5)$$

The electron efficiency η_D (J. M. Houston, Ref.5) is taken to include only the losses due to the heat transfer by the electrons; this quantity is expressed by

$$\eta_D = \frac{iU}{i\Phi_K + \frac{2\pi}{e} (i_K T_K - i_A T_A)} \quad (6)$$

This expression is investigated for the region of the accelerating field as well as for decelerating fields and the results are shown
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S/109/60/005/012/023/033
E192/E582

Influence of the Difference Between the Work Functions of the Electrode of a Thermionic Converter on its Output Parameters

In two figures. From the analysis it is concluded that, other conditions being equal, the highest specific power and electron efficiency can be obtained when φ_a is very low. A converter having $\varphi_a = \varphi_K$, other parameters being fixed, gives the highest specific power and electron efficiency possible with these parameters. The converters in which $\varphi_K - \varphi_a \leq \sim kT_K/s$ can also give the maximum specific power but the short circuit current in this case is lower. All the converters having $\varphi_K - \varphi_a > kT_K/s$ cannot give the maximum specific power. There are 6 figures and 6 references, 3 Soviet (one a translation from English) and 3 non-Soviet.

SUBMITTED: May 21, 1960

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26427-
S/109/60/005/012/025/033
E192/E582

Influence of the Difference Between the Work Functions of the Electrode of a Thermionic Converter on its Output Parameters

Fig.2

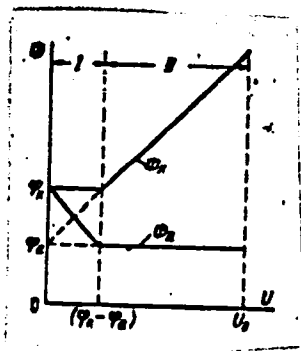
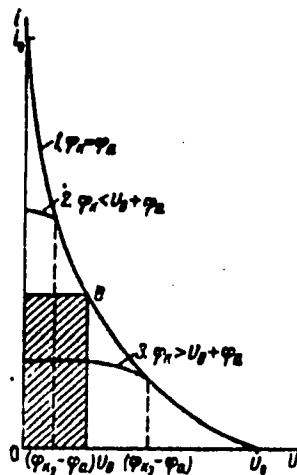


Fig.3



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GRODKO, V.A.; ZOLOTAREVSKIY, V.S.; MARKAR'YAN, B.N.; RUBANOVICH, I.M.

Selection of efficient cathodic materials for a thermoelectron converter. Porosh. met. 3 no.4:79-88 J1-Ag '63. (MIRA 16:10)

1. Institut dvigateley AN SSSR.
(Electrodes) (Thermoelectric generators)

MARKAR'YAN, B.N.

AID Nr. 979-10 29 May

THERMOELECTRIC EMISSION PROPERTIES OF Z-C-UC SOLID SOLUTION SYSTEMS (USSR)

Kul'varskaya, B. S., V. A. Grodtko, B. N. Markar'yan, and I. M. Rubanovich.
Radiotekhnika i elektronika, v. 8, no. 4, Apr 1963, 675-679.

S/109/63/008/004/018/030

The device used in the investigation was a diode with the cathode stamped from a tantalum strip in a shape permitting temperature compensation. The specimens were cemented to the working area of the cathode (0.10 cm^2) in thicknesses of 80μ . After vacuum processing, the specimens were detached in a vacuum of the order of 10^{-7} mm Hg , and measurements were made. The results were plotted along Schottky curves, from which the densities of the saturation current were determined. At 120 amp/cm^2 degree, the value of emission $\varphi(T)$ was calculated by the Richardson-Dushman equation, and the

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AID Nr. 979-10 29 May

THERMOELECTRIC EMISSION PROPERTIES [Cont'd]

S/109/63/008/004/018/030

temperature coefficient was determined. It was found that all the investigated compounds of the system possess a rather high emitting capacity, substantially exceeding the thermoelectric emission of pure refractory metals. Compounds of the system from UC to $(ZrC)_{0.8} - (UC)_{0.2}$ inclusive have the highest thermoelectric emission rate. The $ZrC_{0.8} - UC_{0.2}$ compound is considered the best emitter of the whole system. Stable emission from the cathodes of the investigated system are obtained only after adequate aging at $2000^{\circ}K$. [DW]

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L 38439-66 EWT(1)/EWT(m)/EWP(t)/ETI IJP(c) AT/JD/JG

ACC NR: AP6025237

SOURCE CODE: UR/0057/66/036/007/1163/1165

AUTHOR: Grodko, V. A.; Markar'yan, B. N.

ORG: none

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B

TITLE: The effect of boundary conditions on the transmission of current through a thermal cesium plasma ²¹

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 7, 1163-1165

TOPIC TAGS: cesium plasma, work function, boundary layer plasma, vapor pressure, cathode, electrode, electric current

ABSTRACT: A qualitative analysis based on experimental data was made of the dependence of physical processes occurring in the neighborhood of the electrodes in the plasma of a cesium diode, operating at "quasi-vacuum" and diffusion modes, on the work function of cathode material in vacuum (ϕ). Each experimental diode was cylindrical and the distance between electrodes (d) was 1 mm. The directly heated cathode was 1 mm in diameter and 50 mm long. The collector consisted of three sections: the central or operating section (15 mm long), and two screening sections. The dependences of the short-circuit cathode current i on the pressure of cesium vapor p at fixed cathode and anode temperatures T_c and T_a , respectively, as well as on d for different values of ϕ (5.0, 4.5, 4.0, 2.7 v) i.e., for different boundary con-

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ACC NR: AP6025237

ditions on the cathode, were experimentally determined. The dependences show that in the investigated ranges of electrode temperatures and vapor pressures of cesium, the following relationships take place: at fixed T_c , T_a , d , and φ , the function $i = i(p)$ passes through a maximum; the value of short-circuit current i_0 at optimum value of cesium vapor pressure p_0 and fixed electrode temperatures is independent of $|\varphi|$; a decrease of φ from 5.0 to 2.7 under the same conditions is followed by a continuous rise of p_0 ; an increase of T_c at fixed φ is followed by the rise of i_0 and p_0 . The dependence of the effective cathode work function $\epsilon\psi$ on the vapor pressure of cesium p at $T_c = \text{const}$ and different values of φ shows that with the rise of p the greatest decrease of ψ corresponds to large values of φ . Investigation of the effect of T_c on the relationship between the optimum short-circuit current and the vapor pressure of cesium at fixed values of φ shows that a correspondence exists between large values of T_c and ψ . An increase of T_c may result in an increase in the value of optimum short-circuit current. Such variation of i_0 and p_0 caused by variation of T_c is consistent with the experiment. Orig. art. has: 4 figures. [JA]

SUB CODE: 20/ SUBM DATE: 06Aug65/ ORIG REF: 006/ OTH REF: 007
ATD PRESS: 5042

Cord 2/2

AMBARTSUMYAN, V.A., redakter; MARKARYAN, B.Ye.

[Star association around P Cygni] Zvezdnaya assotsiatsiya vokrug
P Lebedia. Brevan, Izd-vo Akademii nauk Armianskei SSR, 1949. 17 p.
(Byurakan. Observatoriia. Soobshcheniia, no.2). (MIRA 9:4)
(Stars)

MARKARYAN, B. YE

Markaryan, B. Ye. "Stellar associations in selected area No. 8," Doklady (Akad. nauk Arm. SSR), Vol. X, No. 2, 1949, p. 61-65, (Resume in Armenian), - Bibliog: 6 items.

SO: U-3736, 21 May 53, (Letopia 'Zhurnal 'nykh Statey, No. 18, 1949).

MARKARYAN, B. Ye.

Stars - Clusters

Classification of open (galactic) star clusters. Part I. Soob. Biur. obs. No. 5, 1950.

Monthly List of Russian Accessions, Library of Congress, November 1952. UNCLASSIFIED.

MARKARYAN, B.Ye.

[Reviewed list of O-type star association] Peresmotrennyi spisok
svezdnykh assotsiatsii tipa O. Otdel'nyi ottisk iz "Dokladov"
Akademii nauk Armianskoi SSR, tom XV, no.1, 1952 g. Brevan, Izd-vo
Akad.nauk Armianskoi SSR, 1952. p. 11-14. [Microfilm] (MLRA 8:9)
(Stars)

MARKARYAN, B.Ye.

Revised list of the O-type star associations. Dokl. AN Arm. SSR 15
no. 1:11-15 '52. (MIRA 9:10)

1. Byurakanskaya astrefizicheskaya observatoriya. Predstavlene V.A.
Anbartsunyanem.
(Stars--Clusters)

MAHARJAN, B.Ye.

**Stellar association Cepheus II. Soob.Biur.obser. no.11:3-18 '53.
(Stars--Clusters) (MIRA 7:12)**

MARKARYAN, B. Ye.

Expansion of open star cluster IC 2602. Soob. Biur. obser. no. 11:
19-27 '53. (MLBA 7:12)

(Stars--Clusters)

MARKARYAN B. Ye
MARKARYAN, B.Ye.

Fluctuation in the visible distribution of stars. *Iss. AN Arm.*
SSR Ser. *FNET* nauk 7 no.3:33-44 My-Je '54. (MLRA 8:3)
(Stars—Distribution)

MARKARYAN, B.Ye.; AMBARTSUMYAN, V.A., otvetstvennyy redaktor.

Evolution of open star clusters. Soob.Binr.obser. no.12:3-22 '54.
(Stars--Clusters) (MLRA 8:1)

AMRARTSUMYAN, V.A.; MARKARYAN, B.Ya., otvetstvennyy redaktor.

Phenomenon of discontinuous emission and sources of stellar
energy. Soob.Biur.obser. no.13:3-35 '54. (MLRA 8:1)
(Stars--Radiation) (Stars, Variable)

MARKARYAN, B.YE.

"Reported in detail on the interrelationship of diffuse radiating nebulae and young clusters", a paper presented at the Conference on Nonstationary stars held at the Byurekan Astrophysics Observatory Of the Academy of Sciences Armenian SSR from September 20-23 1956.

Sum. I287

S/035/59/000/003/013/039
A001/A001

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1959, No. 3,
p. 38, # 1937

AUTHOR: Markaryan, B. Ye.

TITLE: A Colorimetric Investigation of the Spiral Galaxy M 101

PERIODICAL: Soobshch. Byurakansk. observ., 1958, No. 24, pp. 3-18 (Armen.
summary)

TEXT: The entire spiral galaxy M 101 was photometrically investigated in photographic and visual light. Observations were carried out with a 21''-21'' Schmidt-type telescope. The results show that this galaxy becomes noticeably bluer with an increasing distance from the center, color indices from $+0^m.9$ at the nucleus attaining the value of $+0^m.3$ at periphery. This phenomenon is due to the effect of spiral arms and a continuous background which also becomes bluer with increasing distance from the center. The integrated photographic magnitude of the galaxy, determined by photographic summing of luminosities, amounts to $8^m.5$. The total luminosity of spiral arms in photographic and visual light amounts respectively to $1/4$ and $1/7$ of the galaxy integrated brightness.

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S/035/59/000/003/013/039
A001/A001

A Colorimetric Investigation of the Spiral Galaxy M 101

The integrated color index of the galaxy is equal to $+0^m.5$ and the color index of the nucleus to $+0^m.95$. The proper color of the spiral arms is almost constant, the color index varies along the arms in the range from $-0^m.1$ to $+0^m.1$. This galaxy has a rather bright continuous background, in which white stars participate, and this leads to the conclusion that an intermediate type of stellar population exists in it. The number of blue and white stars in this galaxy is estimated to be of the order of 10^7 . ✓

Author's summary.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

MARKARIAN, B.Ye.

Double galaxy M 51. Soob.Biur.obser. no.25:15-34 '58.
(MIRA 11:12)

(Galaxies)

MARKARYAN, B. YE.

PHASE I BOOK EXPLOITATION

SOV/4798

Akademiya nauk Armyanskoy SSR, Yerevan. Byurakanskaya observatoriya

Soobshcheniya, vyp. 26 (Communications of the Byurakan Observatory of the Academy of Sciences of the Armenian SSR, No. 26) Yerevan, 1959. 82 p. 700 copies printed.

Resp. Ed.: Viktor Amasaspovich Ambartsumyan; Tech. Ed.: M.A. Kaplanyan.

PURPOSE: This publication is intended for astronomers and astrophysicists.

COVERAGE: This issue of the Communications of Byurakan Observatory contains articles dealing with the properties of stellar associations in spiral galaxies, investigations of planetary nebulae, and the instruments and techniques used in photometry. No personalities are mentioned. References follow each article.

TABLE OF CONTENTS:

Markaryan, B. Ye. Color and Radiance of Bright Stellar Associations of the Spiral Galaxies M51 and M101

3

Card 1/3

Communications of the Byurakan Observatory (Cont.)

SOV/4798

Gurzadyan, G.A., and N.A. Razmadze. Polarimetric Investigation of the Planetary Nebula NGC 7026	19
Arakelyan, M.A. Remarks on the Photometric System U, B, V	27
Mirzoyan, L.V., and E. Ye. Khachikyan. Investigation of the Comet Mrkos (1957 d.) I	35
Markaryan, B. Ye. Characteristic Features of the Distribution of Open Clusters in the Galaxy Plane	53
Gurzadyan, G.A. Magnetic Drag in the Planetary Nebulae	59
Gurzadyan, G.A. Observations on One Application of the Electrophotometric Planimeter	77

The author describes a new method of using an electrophotometric planimeter in the processing of microphotograms. The operating principle of this device is based on the measurement of the stream of light equivalent to the given plane. The advantage of this instrument, besides the simplicity and quickness of its operation, is its high precision (measurement error less than 1%) which, moreover, does not depend on the form and size of the measured surface. The efficiency of the proposed method may be increased

Card 2/3

Communications of the Byurakan Observatory (Cont.)

SOV/4798

by using two sighting slits with different apertures consecutively, in order to reduce the fluctuation of background brightness. The method of two sighting slits can also be used in other fields of photometry, particularly in measuring star brightness by means of electrophotometry.

AVAILABLE: Library of Congress

Card 3/3

JA/dwm/mas
2-27-61

MARKARYAN, B. YE.

PLANS I BOOK EXPLANATION NOV/3/05

Zvezdchaniye po voprosam kosmologii. 6th, Moscow, 1957
 Vseplakhticheskiye astronomiya i kosmologiya; trudy sovetskikh
 (Extragalactic Astronomy and Cosmology; Transactions of the 6th
 Conference on Problems of Cosmology, June 5-7, 1957) Moscow, AN
 SSSR, 1959. 273 p. Errata slip inserted. 1,500 copies printed.
 Sponsoring Agency: Akademika nauk SSSR.

M. of Publishing House: L.V. Samsonenko; Tech. Ed.: G.M. Shevch-
 enko; Editorial Board: D.A. Frank-Kamenetskiy (Resp. Ed.) Pro-
 fessor; B.A. Vorontsov-Vel'yaminov, Corresponding Member.

PURPOSE: The book is intended for astronomers and physicists studying
 problems of general cosmology.

COVERAGE: The book is a collection of papers on cosmology read by
 scientists participating in a conference held in Moscow on June
 5-7, 1957. The papers review recent observational and theoretical
 work in extragalactic astronomy, gravitational theory, theory of
 relativity, red shift, radio astronomy, formation of chemical
 elements, thermodynamics of the universe, entropy, etc. No
 personalities are mentioned. There are references following
 most of the reports.

MARKARYAN, B. YE. Spiral Galaxy M 101 51

Martynov, B. Ya. Reliability of Observational Data in Extra-
 galactic Astronomy 70

Kratovskiy, V. I. and P. V. Shcheglov. Application of Electronio-
 Optical Methods to Extragalactic Astronomy 89

Vitkevich, V. V. Discrete Sources of Radio Emission (Radio Stars) 94

Ushurbat, K. L. Experimental Verification of the General
 Theory of Relativity (Summary of Report) 114

Visnov, A. A. Spatial, Non-homogeneous Distributions of the
 System of Gravitating Particles 116

Sverdlovskiy, A. Ya. Isotropic Models of the Universe 131

Lifshits, Ya. M. Gravitational Stability in the General Theory
 of Relativity (Summary of Report) 131

Zel'manov, A. L. Relativistic Theory of an Anisotropic Non-
 Homogeneous Universe 144

Shirakov, M. F. Theory of Red Shift in Spectra of Distant
 Objects 175

Shklovskiy, I. S. Radio Astronomy and Cosmology (Summary of Report) 186

Cherdynitser, V. V. Conditions of Formation of Atomic Nuclei
 According to Data on Their Distribution 192

Frank-Kamenetskiy, D. A. Origin of Chemical Elements From the
 Point of View of the Theory of Internal Structure and Stellar
 Evolution 200

Zaslavskiy, Ya. P. Problems of Statistical Physics and Thermo-
 dynamics of Gravitating Systems 214

Idlis, G. N. Structural Infinity of the Universe and the
 Metagalaxy as a Typical Populated Cosmic System (Sum-
 mary of Report) 270

Flickin, I. R. Some Remarks on the Growth of Entropy 228

Staryukovich, K. P. On the Thermodynamics of the Universe 219

Kaan, G. I. General Problems of Cosmology 243

S/035/02/000/002/011/052
A001/A101

AUTHOR: Markaryan, B. Ye.

TITLE: Determination of the nature of stellar system populations from partial luminosities

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 2, 1962, 39-40, abstract 2A346 ("Soobshch. Byurakansk. observ.", 1960, no. 28, 51-74, Armenian summary)

TEXT: The distribution of summary luminosities of stars of different classes can be determined from the results of multi-color photometry of integrated radiation of a system. The author derives the equation:

$$\sum_s 10^{-0.4 U_s} L_s = 10^{-0.4 U}$$

for section U of six-color photometry, as well as 5 corresponding equations for sections: V, B, G, R and I. Here U is color of the system obtained from observations, U_s is the known color of stars of class s, L_s is an unknown magnitude

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Determination of the nature ...

S/035/62/000/002/011/052
AC01/A101

characterizing relative luminosity of all stars of class s; knowing the latter one can determine the values of summary luminosities of stars of the given class in fractions of luminosity of the whole system in each of the spectrum sections considered. Having 6 equations of the mentioned type, L_s values can be determined for no more than 6 star classes. Using the data of J. Stebbins and A. F. Whitford's six-color photometry, the author determined by this method partial luminosities of globular clusters M2, M13, M15, and M92. Integrated luminosities are presented in the form of sums of partial luminosities of stars of classes b, A0, dF2, dG0, gG1 and gK3, where b denotes blue stars forming the horizontal branch of the diagram beyond the gap. Allowance has been made for interstellar absorption. It was found that the pattern of distribution of partial luminosities varies strongly while passing from one spectrum section to another; the main role in radiation of globular clusters is played by yellow stars whose summary luminosity varies within from 40 to 60% of the total radiation. A formula has been derived making it possible to determine approximately luminosity function on the basis of relative partial luminosities and absolute magnitudes of the system as a whole and its constituent stars in any spectrum section. The calculated luminosity function for M92 agrees well with the observed one. Stebbins' and Whitford's data are used for determining partial luminosities

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S/035/62/000/002/011/05
A001/A101

Determination of the nature ...

in the galaxies: M 32, M 31 (nucleus) and in central parts of the spiral galaxies: M 33, M 51, M 101. Interstellar absorption is taken into account. The results are presented. The conclusion is drawn that the major part of radiation from M 32 and the nucleus of M 31 in the long wavelength portion of spectrum, up to green light, is due to red stars, and in the short wavelength portion - to yellow stars. In Sc-type galaxies more than a half of integrated radiation in yellow light is yielded by yellow stars, a fifth by red giants and approximately the same by white-blue stars. In violet light blue and white stars produce more than a third of luminosity of Sc galaxies. There are 15 references. ✓

B. Fesenko

[Abstracter's note: Complete translation]

Card 3/3

MARKARYAN, B.Ye.; AREKELYAN, S.N.

Luminosity function of Praesepe Cluster (NGC 2632). Soob.Biur.obser.
no.29:65-70 '61. (MIRA 15:1)
(Stars--Clusters)

MARKARYAN, B.Ye.; OGANESYAN, E.Ya.

White dwarfs in Praesepe Cluster (NGC 2632). Soob.Biur.obser. no.29:
71-80 '61. (MIRA 15:1)

(Stars--Clusters)

MARKARYAN, B.Ye.

Disintegrating group of galaxies in the constellation of Lion. Dokl.
AN Arm. SSR 33 no.4:161-164 '61. (MIRA 15:1)

1. Byurakanskaya astrofizicheskaya observatoriya AN Armyanskoy SSR.
Predstavleno akademikom V.A.Ambartsumyanom.
(Nebulae)

MARKARYAN, B. Ye.; OGANESYAN, E. Ya.; ARAKELYAN, S. N.

Detailed colorimetry of galaxies NGC 2976, 3031 (M 81), 3034
(M82), and 3077. Soob. Blur. obser. no.30:3-20 '62.
(MIRA 15:10)

(Galaxies)

MARKARYAN, B.Ye.

Remarks on the nature of galaxy M 82. Astron. zhur. 39
no. 6:1041-1044 N-D '62. (MIRA 15:11)

1. Byurakanskaya astrofizicheskaya observatoriya AN
ArmSSR.

(Galaxies)

L 18387-65 EWG(v)/EWT(1)/EEC(t) Pe-5/Pae-2 SSD/AFNL/AFETR GH
ACCESSION NR: AR4040394 S/0269/64/000/005/0043/0043

SOURCE: Ref. zh. Astron. Otd. vy*p., Abs. 5.51.345

AUTHOR: Markaryan, B. Ye.

TITLE: The nature of galactic chains

CITED SOURCE: Soobshch. Byurakansk. observ., vy*p. 33, 1963, 29-39

TOPIC TAGS: galaxy, galactic cluster, spiral galaxy, constellation Pisces, constellation Deva

TRANSLATION: The author discusses chains of galaxies outside clusters or in thin, open, galactic clusters consisting of not less than six components for which the intervening distance is not greater than 3-4 diameters. The probability of the random formation of such chains is small. In the chains there is an almost total absence of spiral galaxies but it is common to observe chains whose components are in contact with one another; the components of the chains have a high luminosity. The article contains a table of data on chains in the constellations Pisces and Deva, determined from the Palomar Atlas, and a separate table of data on the components of a chain in

1/2

Cord

L 18387-65

ACCESSION NR: AR4040394

the constellation Pisces. This chain consists of seven members; the components of this chain differ little with respect to type, color and radial velocity. It is concluded that many of the observed chains are real physical formations and it is postulated that chains of the trapezium type are one of the forms of development of small groups of galaxies. The chains are unstable; the time required for the decay of the chain in the constellation Pisces is not more than $2 \cdot 10^8$ years. Bibliography with 10 items.
Zh. Anosova

TOPIC TAGS: AA

ENCL: 00

Card 2/2

MARKARYAN, B.Ye.

Nature of galaxies with anomalous spectral features - their
type. Soob. Biur. obser. no.34:3-17 '63.

M82-type irregular galaxies. Soob. Biur. obser. no.34:
19-29 '63. (MIRA 17:5)

MARKARYAN B. Ye.

L 40984-65 EWT(1)/EWG(v)/EEC(t) Pe-5/Pae-2 GW
 ACCESSION NR: AR5009012 S/0269/65/000/002/0033/0033

SOURCE: Ref. zh. Astronomiya. Otd. vyp., Abs. 2.51.278

AUTHOR: None

TITLE: Supernova

CITED SOURCE: Astron. tairkulyar, no. 288, marta 20, 1964, 1

TOPIC TAGS: supernova, galactic astronomy, type I supernova, astrophysics

TRANSLATION: This article reports the discovery made by M. Lovas (Budapest) of a supernova in an unnamed galaxy; the discovery was made on 12/13 March 1964. The coordinates of the supernova are: $\alpha = 11^h 52^m 10^s$, $\delta = 53^\circ 32'$ (1855). The report gives estimates of the brightness made by Lovas, A. D. Chuadze (Abastumani) and B. Ye. Markaryan (Byurakan) (see Table in Enclosure). On 18/19 March B. Balazs obtained a spectrum of the supernova which was typical of type-I supernovae. G. Medvedeva.

SUB CODE: AA

ENCL: 01

Card 1/2

L 40984-65

ACCESSION NR: AR5009012

ENCLOSURE: 01

Table 1.

	Lovas	Chuadze	Markaryan
14/15 Dec 1963	19 ^m ,93		
19 Feb 1964		14 ^m ,0	
20 Feb "		13,2	
20 Feb "		13,6	
12/14 Mar "	13,21		
15/16 Mar "	13,52	13,7	
16/17 Mar "	13,47	13,9	13 ^m ,3

Card 2/2

MARKARYAN, D.S.

"Public health system and medicine in the Chinese People's Republic"
by Chin Hsin-Chung, I.G.Kochergin. Reviewed by D.S.Markarian.
Sov. zdrav. 19 no.11 72-73 '60. (MIRA 13:11)
(CHINA—MEDICINE) (CHIN HSIN-CHUNG) (KOCHERGIN, I.G.)

IRD, Ye.A.; MARKARYAN, D.S. (Moskva)

Experimental hormone therapy of ovarian follicular cysts in rats.
Probl. endok. i gorm. 9 no.5:55-59 S-0'63 (MIRA 16:12)

1. Iz laboratorii eksperimental'noy gormonoterapii (zav. -
kand. biologicheskikh nauk N.I.Lazarev) Instituta eksperimen-
tal'noy i klinicheskoy onkologii (dir. - deystvitel'nyy chlen
AMN SSSR prof. N.N.Blokhin) AMN SSSR.

MEDZHOYAN, A.L.; MARKARYAN, E.A.

Bis-(5-carbomethoxy-2-tetrahydrofuryl)methane. Sint. geterotsikl.
soed. no.3:24-26 '58 (MIRA 13:3)
(Methane)

MINDZHOYAN, A.L.; MARKARYAN, E.A.

~~4~~-Methyl-~~5~~-(5-methyl-2-furyl)allyl alcohol. Sint. geterotsikl.
seed. no. 3745-46 '58 (MIRA 13:3)
(Propenol)

MNDZHOYAN, A.L.; MARKARYAN, E.A.

5-n-Tolylmethyl-2-furancarboxylic acid. Sint. geterotsikl. soed.
no. 3:67-69 '58 (MIRA 13:3)
(Furoic acid)

MNDZHOYAN, A.L.; MARKARYAN, E.A.

5-a-Tolylmethylfurfurole. Sint. geterotsikl. soed. no.3:70-72 '58
(Furaldehyde) (MIRA 13:3)

MEDZHOYAN, A.I.; MARKARYAN, E.A.

N-Tolyl-2-furylmethane. Sint. geterotsikl. soed. no.3:72-73 '58
(Methane) (MIRA 13:3)

MNDZHOYAN, A.L.; MARKARYAN, E.A.

Ethyl ester of α -methyl- β -(5-methyl-2-furyl) acrylic acid.
Sint. geterotsikl. soed. no.3:83-85 '58 (MIRA 13:3)
(Furanacrylic acid)

MUDEHOYAN, A.L.; AFRIKYAN, V.G., akademik; BADALYAN, V.Ye.; MARKARYAN, E.A.;
KHORENYAN, G.A.

Investigation of derivatives of p-alkoxybenzoic acids. Dokl. AN
Arm. SSR 27 no.3:161-177 '58. (MIRA 11:12)

1. AN Armyanskoy SSR.
(Benzoic acid)

MNDZHOYAN, A.L., akademik; AFRIKYAN, V.G.; TATEVOSYAN, G.T.; AGBALYAN, S.G.;
GRIGORYAN, M.T.; DIVANYAN, N.M.; BADALYAN, V.Ye.; MARKARYAN, B.A.

Investigation in the field of furan derivatives. Report No.21.
(MIRA 12:5)
Dokl. AN Arm.SSR.27 no.5:305-314 '58.

1. Institut tonkoy organicheskoy khimii AN ArmSSR. 2. AN ArmSSR
(for Mndzhoyan).
(Furan)

MEDZHOYAN, A.L.; AFRIKYAN, V.G.; MARKARYAN, B.A.

Furan derivatives. Report No.23: Some amino esters of
5-substituted 2-furancarboxylic acids. Izv.AN Arm.SSR.
Khim.nauki 12 no.6:435-442 '59. (MIRA 13:7)

1. Institut tonkoy organicheskoy khimii AN Armyanskoy SSR.
(Furancarboxylic acid)

MARKARYAN, E.A.; YEVSTIGNEYEVA, R.P.; PREOBRAZHENSKIY, N.A.

Structure of geissoschizine. Izv. AN Arm.SSR. Khim.nauki
14 no.5:511-512 '61. (MIRA 15:1)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni
M.V. Lomonosova.
(Geissoschizine)

YEVSTIGNEYEVA, R.P.; MARKARYAN, E.A.; PREOBRAZHENSKIY, N.A.

Synthesis of methyl ester of indolo (1,2:2',3')3,4,5,6,7,8,-
hexahydro-7-quinolizylacetic acid. Zhur.ob.khim. 31 no.7:
2187-2190 J1 '61. (MIRA 14:7)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni
M.V. Lomonosova.

(Acetic acid)

MARKARYAN, E.A.; YEVSTIGNEYEVA, R.P.; PREOBRAZHENSKIY, N.A.

Synthesis of β -substituted glutaric acid esters. Zhur. ob. khim.
32 no.1:140-142 Ja '62. (MIRA 15:2)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni
M.V.Lomonosova.

(Glutaric acid)

MNDZHOYAN, A.L.; AFRIKYAN, V.G.; KALAYDZHYAN, A.Ye.; KAZARYAN, L.Z.;
MARKARYAN, E.A.

Derivatives of furan. Report No.29: Amino esters of 4,5-substituted 2-furancarboxylic acids. Izv. AN Arm.SSR. Khim. nauki
(MIRA 17:8)
16 no.2:175-179 '63

1. Institut tonkoy organicheskoy khimii AN ArmSSR.

MARKARYAN, E.A.; YEVSTIGNEYEVA, R.P.; PREOBRAZHENSKIY, N.A.

Condensation of esters of β -substituted glutaric acids with
tryptamine. Zhur.ob.khim. 83 no.4:1123-1127 Ap '63.
(MIRA 16:5)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni
M.V.Lomonosova.
(Glutaric acid) (Tryptamine)

MDZHOYAN, A.L.; MARKARYAN, E.A.; SOLOMINA, L.P.; KALAYDZHYAN, A.Ye.

Derivatives of furan. Part 30: Synthesis and some transformations
of substituted α -cyanofurans. Izv. AN Arm.SSR.Khim.nauki 17
no.1:89-94 '64. (MIRA 17:4)

1. Institut tonkoy organicheskoy khimii AN Armyanskoy SSR.

MNDZHOYAN, A.L.; MARKARYAN, E.A.; AKOPYAN, N.Ye.; SOLOMINA, L.F.

Furan derivatives. Part 32: Certain substituted furfurylamides.
Izv.AN Arm.SSR. Khim.nauki 18 no.4:397-402 '65. (MIRA 18:12)

1. Institut tonkoy organicheskoy khimii AN Armyanskoy SSR.
Submitted May 27, 1964.

L 26786-66 EWT(1)/EWT(m) RM/RO

ACC NR: AP6017451

SOURCE CODE: UR/0171/65/018/004/0403/0407

AUTHOR: Markaryan, E. A.

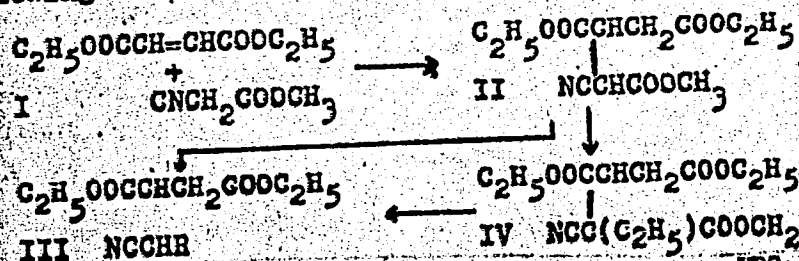
ORG: Institute of Fine Organic Chemistry, AN ArmSSR (Institut tonkoy organicheskoy khimii AN ArmSSR)

TITLE: Synthesis of tetracyclic systems of indole alkaloid 1

SOURCE: AN ArmSSR. Izvestiya. Seriya khimicheskikh nauk, v. 18, no. 4, 1965, 403-407

TOPIC TAGS: maleic acid, ester, condensation reaction, alkylation, alkaloid, organic synthetic process

ABSTRACT: A method of constructing the tetracyclic systems starting from tryptamine and esters of substituted succinic acids obtained from the diethyl ester of maleic acid according to the following scheme was studied:



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UDC: 542.91+547.461.4

L 26786-66

ACC NR: AP6017451

3

Condensation of maleic ester (I) with the ester of cyanacetic acid yielded the diethyl ester of α -cyan-carbomethoxymethyl)-succinic acid (II). Alkylation of the tricarboxylic ester of II with ethyl iodide in the presence of sodium alcoholate yielded the diethyl ester of α -(α' -cyano- α' -carbomethoxy)-propylsuccinic acid (III); saponification and decarboxylation of the latter yielded the diethyl ester of α -(α' -cyano-propylsuccinic acid (IV, R=C₂H₅). Similar saponification and decarboxylation of the tricarboxylic ester of II yielded the diethyl ester of α -cyanomethylsuccinic acid (IV, R=H). Thus, the developed method of synthesis is suitable to obtain alkaloids of the flavoscarpin type. L. V. Khazhakyan and A. V. Kazaryan aided in the study. /JPRS/

SUB CODE: 07 / SUBM DATE: 07Jul64 / ORIG REF: 006 / OTH REF: 002

Card 2/2 CC

MESCHYAN, S.R.; MARKARYAN, E.M.

Creep of soils not saturated with water. Izv. AN Arm. SSR. Ser. fiz.-
nauk 17 no.4:117-123 '64. (MIRA 17:11)

1. Institut matematiki i mekhaniki AN Armyanskoy SSR.

DANGYAN, M.T.; SHAKHNAZARYAN, G.M.; MARKARYAN, G.A.

Preparation of α -alkoxyalkyl- γ -chloroallylacetic acids.
Izv. AN Arm.SSR. Khim.nauki 14 no.5:491-494 '61. (MIRA 15:1)

1. Yerevanskiy gosudarstvennyy universitet, kafedra organicheskoy khimii.

(Acetic acid)

BUKANKOV, Ye.I.; MARKARYAN, G.A.; YUSUPOV, I.Yu.

Attachment to the breaking test machine for the testing of
plastic spike heels. Kosh.-obuv. prom. 7 no.12:14-16 D '65.
(MIRA 19:2)

MARKARYAN, G.G.

Changing the flow diagram of a complex rectification column for
increasing the capacity of atmospheric installations. Azerb.
neft.khoz. 41 no.8:31-35 Ag '62. (MIRA 16:1)
(Plate towers)

MARKARYAN, G.K.

Work hardening of a surface and its relationship with chip
formation. Trudy Sem.po kach.poverkh. no.5:356-365 '61.
(MIRA 15:10)

(Metal cutting)

MARKARYAN, G. K.

Cand Tec Sci, Diss -- "Principles in the hardening of a worked surface during machining of metals". Yerevan, 1961. 22 pp with graphics, 23 cm (Committee of the Council of Min ArmSSR on Higher and Inter Spec Educ. Yerevan Polytec Inst imeni K Marks), 150 col. ss, Not for sale (KL, No 9, 1961, p 183, No 24353). [61-52360]

MARKARYAN, G. M. und ANICHKOV, N. N.

Vergleichende Beobachtungen über die Speicherung verschiedener Vitalfarbstoffe und Aufschwemmungen in den Organen der Mäuse. Archiv biologischer Wissenschaften, 1931, 227-232. /Russisch/

MARKARYAN, G. M.

"Kala-Azar (Visceral Leishmaniasis) In Children in the Armenian SSR." Order of Labor Red Banner Inst of Pediatrics of the Acad Med Sci USSR, Moscow-Yerevan, 1955
(Dissertation for the Degree of Doctor of Medical Sciences)

SO: Knizhnaya Letopis', No. 32, 6 Aug 55

Name: MARKARYAN, Gabriyel Movsesovich

Dissertation: Kala-Azar (Internal Leishmaniasis) of Children
in the ArSSR

Degree: Doc Med Sci

Affiliation: Yerevan Med Inst

Defense Date, Place: 2 Mar 56, Council of Department of Clinical
Medicine, Acad Med Sci USSR

Certification Date: 17 Nov 56

Source: BMVO 6/57

MARKARYAN, G.M.; ISRAKLYAN, L.G.

Treating enteric toxicoses by drip clysmata; an abstract. *Pediatrics*
37 no.3:84 Apr '59. (MIRA 12:4)

1. Iz kafedry detskikh bolezney Yerevanskogo meditsinskogo instituta.
(INTESTINES--DISEASES) (RHMA)

MARKARYAN, G. P., Assistant
Yerevan Zooveterinary Institute

"Pentothal narcosis in veterinary practice"

SOURCE: Veterinariya, Vol 28, No 9, 1951, p 48